

PHILOSOPHICAL TRANSACTIONS.

April 21. 1673.

The C O N T E N T S.

*An accurate Description of the Cacao-tree, and the way of its Curing and Husbandry, &c. Directions for Inquiries concerning Stones and other Materials for the use of Building; together with a suggestion for retrieving the Art of hardning and tempering Steel for cutting hard Marbles. An Account of the Advantages of Virginia, for building Ships. A way of making Vines grow to advantage, and for the obtaining riper, and greater plenty of Grapes. An Observation made upon the Motion of the Hearts of two Animals, after their being cut out. An Accompt of two Books. I. *Vini Rbenani, imprimis BACCARACENSIS, Anatomia Chymica*, a Joh. Dav. Portzio Ph. & M.D. II. *De Poematum Cantu, & Viribus Rhythmi*.*

An accurate Description of the Cacao-tree, and the way of it's Curing and Husbandry, &c; given by an Intelligent person now residing in Jamaica.

— **I** Send you on this Ship a box, that hath in it a Cacao-tree painted to the life. 'Tis certain, nothing was ever more like; and this Picture contains the whole History of the Cacao. It's of an old Tree; the body of which (as they commonly are,) is about 4 inches in diameter, 5 foot in height, and above 12, from the ground to the top of the Tree.

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These Trees are exceedingly different amongst themselves ; for, some shoot up in 2 or 3 bodies ; others in one, as this. Their Leaves are many of them dead, and most discolour'd, unless on very young Trees. They are not at all beautiful, nor so agreeable to the Eye, as the Fruit is to the Palate of them that love Chocolatto. The number of Codds the Tree produces, is uncertain : But we reckon, a bearing Tree yields from 2 to 8 pound of nuts a year ; and each Codd contains from 20 to 30 nuts.

The Manner of Curing them is ; to cut them down when they are ripe, and to lay them to sweat 3 or 4 dayes in the Codds ; which is done by laying them on heaps. After this they cut the codds, and take out the nuts, and put them into a trough cover'd with plantan-leaves, where they sweat again about 16 or 20 days. The nuts that are in each codd, are knit together by certain fibres, and have about them a white kind of pulp, that's agreeable to the palate. By the turning and swetting their little strings are broken, and the pulp is imbibed and mingled with the substance of the nut. After this, they are put to dry 3 or 4 weeks in the Sun, and then they become of a reddish dark colour, as you see, and so are cured.

What is remarkable in this Fruit is, that the Codds grow only out of the Body or great Limbs and boughs ; and that at the same time, and in the same place, there are blossoms, young and ripe fruit.

These Trees bear at different times ; the greatest crop at most of our Cacao walks is in *December* and *January* : But at one of Colonel *Adofords* walks, whence this Tree was taken, they bear most in *May* ; yet its not above 5 miles from those walks, which bear alwaies in *December* : But those that bear then, have some fruit in *May* ; as the other have in *December*.

It's planted first in the Nut, alwaies under shade : Some do it under *Caffe* ; others, under Plantan-tree, and some in the Woods. The Spaniards used a certain large shady plant, call'd by them *Madre di Cacao* : We only th'others : and seldom transplant, only where it fails, as it doth many times in open, poor and dry lands : for, this Tree requires to be shelter'd

ter'd from the Sun while 'tis young, and alwaies from the Nord-East winds; and to have a fat moist low soyl, which makes them to be planted commonly by Rivers and between Mountains: So that 'tis ill living where there are good Cacao-walks. In a year's time the Plant comes to be 4 foot high, and hath a leaf six times as big as an old Tree, which, as the Plant grows bigger, falls off, and lesser come in their place, which is another extraordinary quality of this Tree.

The Trees are commonly planted at 12 foot distance; and at 3 years old, where the ground is good, and the Plant prosperous, it begins to bear a little, and then they cut down all or some of the shade, and so the fruit increases till the 10th or 12th year; then the Tree is supposed to be in its prime. How long it may continue so, none with us can guess; but it's certain, the root generally shoots out suckers, that supply the place of the old stock when dead or cut down, unless when a ny ill quality of the ground or air kill both.

Neither we, nor our neighbours of Hispaniola or Cuba know, what to attribute this late blast of the Cacao to. Some fancy, 'tis age; others think, 'tis worms; some believe it to be want of shade, or an ill quality of the winds; but most judge it's some Constellation or ill Disposition of the Climate. We formerly might have made here 2 or 300000 pound *per annum*; but these two last years hardly 5000. Yet are not people at all discourag'd, but plant it faster than ever, especially to the Eastward, where are divers young walks, that have not one dead or blasted tree.

Cacao was originally of these Indies and wild. Towards Maracajo are divers Spots of it in the mountains; and I am informed, the Portugueses have lately discover'd whole Woods of it up the River of Maranon.

This is the History of the Cacao and its Husbandry. You cannot be ignorant of its use and virtue; but nothing, me thinks, commends it so much, as that it should pass by detail for Money in New Spain and the Silver-Countries.